IN THE CLAIMS:

Please cancel claims 2-4, 9-10, 14-16, and 20-22, and amend the remaining claims as follows:

1.   (Currently Amended) A method of instructing a computer program to self-optimize, said method comprising:

inputting ~~commands~~ a selection command that selects one function from a list of pre-selected functions into said computer program, wherein each function from said list of pre-selected functions is associated with a reward; and

allowing a learning protocol in said computer program to track and reward said one function that is selected and to determine an approximate optimal ~~policy of~~ choice of operation of said computer program based on ~~at least~~ said ~~commands~~ selection command.

2-4.   (Canceled).

5.   (Currently Amended) The method of claim [[3]] 1, ~~wherein said commands comprise~~ further comprising inputting a rule command ~~operable for instructing~~ that establishes a rule for said computer program ~~of~~ on how to ~~make~~ determine said approximate optimal choice of operation.

6.   (Currently Amended) The method of claim [[3]] 1, ~~wherein said commands comprise~~ further comprising inputting a reward command ~~operable for instructing~~ that provides a reward,

at a point of choice in said computer program, for said one function selected by said selection command, which ~~of said operational choices~~ results in said approximate optimal choice for self-optimizing said ~~operation of the~~ computer program.

7.   (Currently Amended) A method of ~~autonomically~~ optimizing a computer program, said method comprising:

      specifying at least one ~~choice~~ point of choice in said computer program;

      defining a set of alternate choices at each ~~choice~~ point of choice, wherein said set of alternate choices include operational choices ~~comprising~~ comprises:

      inputting a selection command that selects one function from a list of pre-selected functions into said computer program wherein each function from said list of pre-selected functions is associated with a reward; ~~and~~

      allowing a learning protocol in said computer program to track and reward said one function that is selected to determine an approximate optimal operation of said computer program based on said selection command; and

      setting at least one feedback point for each ~~choice~~ point of choice.

8.   (Currently Amended) The method of claim 7, further comprising allowing a learning protocol in said computer program to determine an approximate optimal ~~policy of~~ operation of said computer program based on said specifying, defining, and setting.

9-10.   (Canceled).

11.	(Currently Amended) The method of claim [[9]] 8, wherein said set of alternate choices include operational choices, further ~~comprising~~ comprises:

inputting a rule command into said computer program, wherein said rule command ~~is operable for instructing said computer program of~~ establishes a rule on how to ~~make~~ determine said approximate optimal ~~choice~~ operation.

12.	(Currently Amended) The method of claim ~~9~~ 8, wherein said set of alternate choices include operational choices, and wherein said method further ~~comprising~~ comprises:

inputting a reward command into said computer program, wherein said reward command ~~is operable for instructing~~ provides reward in said computer program, which ~~of said operational choices~~ results in said approximate optimal choice for optimizing said ~~operation of the~~ computer program.

13.	(Currently Amended) A program storage device readable by computer, tangibly embodying a program of instructions executable by said computer to perform a method of instructing a computer program to self-optimize, said method comprising:

inputting ~~commands~~ a selection command that selects one function from a list of pre-selected functions into said computer program, wherein each function from said list of pre-selected functions is associated with a reward; and

allowing a learning protocol in said computer program to track and reward said one function that is selected and to determine an approximate optimal ~~policy of~~ choice of operation of said computer program based on at least said ~~commands~~ selection command.

14-16. (Canceled).

17.   (Currently Amended) The program storage device of claim ~~15~~ 13, ~~wherein said commands comprise~~ further comprising inputting a rule command ~~operable for instructing~~ that establishes a rule for said computer program ~~of~~ on how to ~~make~~ determine said approximate optimal choice of operation.

18.   (Currently Amended) The program storage device of claim ~~15~~ 13, ~~wherein said commands comprise~~ further comprising inputting a reward command ~~operable for instructing~~ that provides a reward, at a point of choice in said computer program, for said one function selected by said selection command, which ~~of said operational choices~~ results in said approximate optimal choice for optimizing said ~~operation of the~~ computer program.

19.   (Currently Amended) A computer system ~~for instructing a~~ that executes an optimizing computer program ~~to self-optimize~~ comprising:

        a compiler ~~operable for inputting commands~~ that inputs a selection command, said selection command selecting one function from a list of pre-selected functions into said computer program , wherein each function from said list of pre-selected functions is associated with a reward; and

        a software module ~~operable for allowing~~ that includes a learning protocol in said computer program to track and reward said one function that is selected and determine an

approximate optimal ~~policy of~~ operation of said computer program based on <u>at least </u>said

~~commands~~ <u>selection command</u>.

20-22. (Canceled).

23. (Currently Amended) The system of claim ~~21~~ <u>19</u>, wherein said ~~commands comprise~~

<u>compiler further inputs</u> a rule command ~~operable for instructing~~ <u>that establishes a rule for</u> said

computer program ~~of~~ <u>on</u> how to ~~make~~ <u>determine</u> said approximate optimal choice <u>of operation</u>.

24. (Currently Amended) The system of claim ~~21~~ <u>19</u>, wherein said ~~commands comprise~~

<u>compiler further inputs</u> a reward command ~~operable for instructing~~ <u>that provides a reward, at a</u>

<u>point of choice in</u> said computer program<u>, for said one function selected by said selection</u>

<u>command,</u> which ~~of said operational choices~~ results in said approximate optimal choice for

optimizing said ~~operation of the~~ computer program.

25. (Currently Amended) A <u>computer</u> system ~~of autonomically~~ <u>that executes an</u> optimizing

[[a]] computer program<u>,</u> comprising:

      means for specifying at least one ~~choice~~ point <u>of choice</u> in said computer program;

      means for defining a set of alternate choices at each ~~choice~~ point <u>of choice, wherein said</u>

<u>set of alternate choices include operational choices,</u> ~~comprising~~ <u>comprises:</u>

means for inputting a selection command that selects one function from a list of pre-selected functions into said computer program, wherein each function from said list of pre-selected functions is associated with a reward; ~~and~~

allowing a learning protocol in said computer program to track and reward said one function that is selected to determine an approximate optimal operation of said computer program based on said selection command; and

means for setting at least one feedback point for each ~~choice~~ point of choice.